DOCKET NO.: RUCC-0046 (98-0087US) **PATENT**

Application No.: 09/743,840

Office Action Dated: August 12, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method of producing a transgenic turfgrass plant, comprising the steps of:

- (a) culturing <u>embryogenic</u> organogenic tissue from <u>seeds of</u> a turfgrass plant on a medium that promotes de-differentiation of the tissue, to produce regenerable callus tissue;
- (b) inoculating the callus tissue with *Agrobacterium* carrying at least one vector for transformation, the vector comprising <u>virB</u>, <u>virC</u> and <u>virG</u> virulence genes from plasmid pSB1 or pSB4, in which vector is inserted a heterologous DNA construct and a selectable marker conferring antibiotic resistance to transformed cells, wherein the DNA construct and selectable marker are operably linked to a promoter from a monocotyledonous species, wherein the inoculating comprises mixing the callus tissue with the *Agrobacterium* pre-incubated with acetosyringone, under conditions permitting the *Agrobacterium* to infiltrate the callus tissue, thereby forming *Agrobacterium*-infiltrated callus tissue;
- (c) co-culturing the *Agrobacterium*-infiltrated callus tissue under conditions that enable the *Agrobacterium* vector to transform cells of the *Agrobacterium*-infiltrated callus tissue;
- (d) selecting transformed cells by culturing the *Agrobacterium*-infiltrated callus tissue on a selection medium comprising an antibiotic, wherein the transformed cells are resistant to the antibiotic and are selected by their growth in the presence of the antibiotic; and
 - (e) regenerating a transformed turfgrass plant from the transformed cells.
- 2. (Original) The method of claim 1, wherein the turfgrass is a species selected from the group consisting of creeping bentgrass, tall fescue, velvet bentgrass, perennial ryegrass, hard fescue, Chewings fescue, strong creeping fescue, colonial bentgrass and Kentucky bluegrass.
 - 3. Canceled.

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4. Canceled.

5. (Original) The method of claim 1, wherein the promoter is selected from the

group consisting of maize ubiquitin gene promoters, rice actin gene promoters, maize Adh 1

gene promoters, rice or maize tubulin (Tub A, B or C) gene promoters, and alfalfa His 3 gene

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promoters.

6. (Previously presented) The method of claim 1, wherein the selectable marker

gene confers hygromycin resistance on transformed cells.

7. Canceled.

8. Canceled.

9. Canceled.

10. (Currently amended) The <u>method of claim 1, wherein the vector</u> transgenic

turfgrass plant of claim 8, which comprises a transgene selected from the group consisting of:

(a) a gene encoding glucose oxidase;

(b) a gene encoding citrate synthase;

(c) a gene encoding Δ -9 desaturase from Saccharomyces cerevisiae or

Cryptococcus curvatus;

(d) a gene encoding Δ -11 desaturase;

(e) a gene encoding a plant homolog of the neutrophil NADPH oxidase;

(f) a gene encoding bacteriopsin from Halobacterium halobium; and

(g) a gene encoding pokeweed antiviral protein.

11-21. Canceled.